

ABSTRACT OF THE DISCLOSURE

[0024] Apparatus and method for dilation of tissue utilize a tissue expansion device positioned on an inner cannula with an outer overlying expansive sheath that expands upon translation of the tissue expansion device therethrough. The tissue expansion device may be an olive or wedge formed near the tip of the cannula, and the expansible sheath includes two elongated shells that are fixably attached near proximal ends, and that are resiliently connected near distal ends. Translating the tissue expansion device through the expansible sheath expands the dimension of the shells to provide even dilation of surrounding tissue. Additionally, tissue dilation is performed in one continuous motion of retracting the inner cannula through the expansible sheath or pushing the tissue expansion device through the expansible sheath. The outer expansible sheath may be removed from the inner cannula to provide a dissection instrument having minimal outer diameter. The tissue expansion device may provide two stage expansion from a minimal outer dimension in one configuration to a second larger outer dimension in response to an applied axial force to provide enhanced tissue dilation.